

CLASS

4

SAMPLE PAPER

**Science
Olympiad
Foundation**

For Excellence in Science, Maths & IT

INTERNATIONAL MATHEMATICS OLYMPIAD

The actual test paper has 50 questions. Time allowed : 60 minutes. There are 3 sections, 20 questions in section I, 20 in section II and 10 in section III.

Section I : Logical Reasoning, **Section II** : Mathematical Reasoning &

Section III : Everyday Mathematics

SYLLABUS

5 digit Numbers, Place value, Roman Numerals, Addition and Subtraction, Geometry : Square, Rectangle, Circle, Closed, Open Figure, Multiplication, Factors and Multiples, Fractions, Divisions, Measurement, Pictorial representation of data, Money, Time, Series and Pattern Formation of Numbers and Figures.

1. There are eighty-six thousand four hundred seconds in a day. How else could this number be written?
(A) 80,064 (B) 80,640 (C) 86,400 (D) 86,404 (E) None of these.

2. Leena and her mother made a quilt. They used 56 squares and made 8 rows. How many squares are in each row?
(A) 6 (B) 7 (C) 8 (D) 9 (E) None of these.

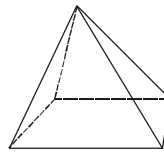
3. What is the same as 25?
(A) 1 ten 15 ones (B) 2 tens 5 ones (C) 5 tens 2 ones
(D) 3 tens 2 ones (E) None of the above.

4. Jyoti walked 3 miles each day. How many miles had she walked after 14 days?
(A) 42 (B) 32 (C) 14 (D) 11 (E) None of these.

5. Ram, Rahul, and Rohit shared a bag of marbles. The bag contained 272 marbles. How many marbles were left over after the friends shared them equally?
(A) 90 (B) 91 (C) 6 (D) 2 (E) None of these.

6. What number goes on the line in the pattern?
1, 2, 4, 8, 16, _____, 64
(A) 20 (B) 26 (C) 32 (D) 34 (E) None of these.

7. How many vertices does this pyramid have?
(A) 4 (B) 5
(C) 6 (D) 8
(E) None of these.



8. Start at 23.
Count by 10 two times.
Add 1.
What number are you at?
(A) 33 (B) 44 (C) 55 (D) 45 (E) None of these.

9. Which of these is the number 5,005,014?
(A) five million, five hundred, fourteen (B) five million, five thousand, fourteen
(C) five thousand, five hundred, fourteen (D) five billion, five million, fourteen
(E) None of the above.

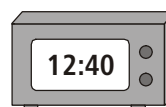
10. Justin solved the problem below. Which expression could be used to check his answer?

$$\begin{array}{r} 454 \\ 3 \overline{)1364} \end{array} : \text{Remainder} = 2$$

- (A) $(454 \times 3) + 2$ (B) $(454 \times 2) + 3$
(C) $(454 + 3) \times 2$ (D) $(454 + 2) \times 3$
(E) None of the above.
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11. Which set of numbers is in order from greatest to least?
(A) 147, 163, 234, 275 (B) 275, 234, 163, 147
(C) 275, 163, 234, 147 (D) 163, 275, 234, 147
(E) None of the above.

12. Aunt Ruby's clock is shown here.
If her niece is going to pick her up in 30 minutes,
what time will be shown on the clock?



- (A) 12 : 10 (B) 12 : 70 (C) 1 : 10 (D) 1 : 60 (E) None of these.
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13. What is the best unit to use for measuring the amount of soda in a drink can?
 (A) millilitre (B) gallon (C) tablespoon (D) cup (E) None of these.

14. What is the rule for this number pattern?
 1, 1, 2, 6, 24, . . .

- (A) Add 0, then add 1, then add 2, and so on
 (B) Multiply by 1, then multiply by 2, then multiply by 3, and so on
 (C) Multiply by 1, then add 1 (D) Multiply by two, then subtract 1
 (E) None of the above.

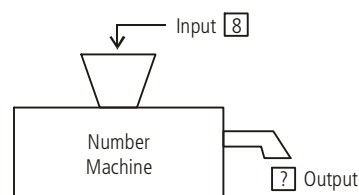
15. Danny and Julie have new sticker books. Danny will put 4 stickers in his book every day and Julie will put 6 stickers in her book every day.

Day	Danny	Julie
1	4	6
2	8	12
3	12	18

How many stickers will Danny have when Julie has 30 in her book?
 (A) 20 (B) 24 (C) 28 (D) 30 (E) None of these.

16. When a number is put into the machine below, a different number comes out.

If 2 goes in, 6 comes out. If 4 goes in, 12 comes out. If 5 goes in, 15 comes out. If 8 goes in, what number should come out?



- (A) 32 (B) 24 (C) 16 (D) 12 (E) None of these.

17. On Monday Sarah sold 54 cups of lemonade. On Tuesday she sold 71 cups of lemonade. How many more cups did she sell on Tuesday compared to Monday?

- (A) 15 (B) 16 (C) 17 (D) 18 (E) None of these.

18. Alexa needs 74 beads to make a necklace. She has 39 beads. How many more beads does she need?

- (A) 35 (B) 36 (C) 45 (D) 39 (E) None of these.

19. There are 3 rows of strawberry plants. Each row has 6 plants. How many strawberry plants in all?

- (A) 9 (B) 18 (C) 22 (D) 24 (E) None of these.

20. The chart shows the number of eggs produced on a farm in the first five months of the year.

Month	Number of Eggs
January	596
February	422
March	587
April	490
May	516

Which of the following statements is true ?

- (A) The number of eggs produced in March was less than in May.
 (B) The number of eggs produced in April was less than in February.
 (C) The number of eggs produced in January was less than in March.
 (D) The number of eggs produced in May was less than in March.

ANSWER KEY

1. (C) 2. (B) 3. (B) 4. (A) 5. (D) 6. (C) 7. (B) 8. (B) 9. (B) 10. (A)
 11. (B) 12. (C) 13. (A) 14. (B) 15. (A) 16. (B) 17. (C) 18. (A) 19. (B) 20. (D)